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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-----------------------------------|----------------------|---------------------|------------------|
| 10/696,176 | 10/28/2003 | Tomonari Horikiri | 1232-5185 | 6564 |
| | 7590 04/21/200 INNEGAN, L.L.P. | EXAMINER | | |
| | ANCIAL CENTER | MOON, SEOKYUN | | |
| NEW TORK, I | N1 10201-2101 | | ART UNIT | PAPER NUMBER |
| | | | 2629 | |
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| | | | NOTIFICATION DATE | DELIVERY MODE |
| | | | 04/21/2008 | ELECTRONIC |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTOPatentCommunications@Morganfinnegan.com Shopkins@Morganfinnegan.com jmedina@Morganfinnegan.com

| Office Action Summary | | Applicat | ion No. | Applicant(s) | Applicant(s) | | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|--------------------|-----------------------------------------------------------------------|--------------|--|--|--|
| | | 10/696,1 | · 76 | HORIKIRI, TOMONARI | | | | |
| | | Examine | r | Art Unit | | | | |
| | | SEOKYU | JN MOON | 2629 | | | | |
| Period fo | The MAILING DATE of this communion Reply | cation appears on th | e cover sheet w | ith the correspondence ac | dress | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | | | | |
| Status | | | | | | | | |
| | Responsive to communication(s) filed | d on 04 February 20 | ากร | | | | | |
| · | Responsive to communication(s) filed on <u>04 February 2008</u> . This action is FINAL . 2b) This action is non-final. | | | | | | | |
| ′= | | <i>'</i> — | | ters prosecution as to the | e merits is | | | |
| ا ال | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | | | |
| Dispositi | on of Claims | , | , | , | | | | |
| · · _ | | ding in the applicati | ion | | | | | |
| - | Claim(s) <u>6,8-10 and 13-16</u> is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | | |
| | | e withdrawn hom of | msideration. | | | | | |
| ′= | 5) Claim(s) is/are allowed. | | | | | | | |
| · · | Claim(s) <u>6,8-10 and 13-16</u> is/are reje | cied. | | | | | | |
| · | Claim(s) is/are objected to. Claim(s) are subject to restrict | ion and/or alaction | roquiromont | | | | | |
| اـــا(٥ | Claim(s) are subject to restrict | ion and/or election | requirement. | | | | | |
| Applicati | on Papers | | | | | | | |
| 9) 🗌 🤈 | The specification is objected to by the | Examiner. | | | | | | |
| 10)🛛 | The drawing(s) filed on <u>28 <i>October 20</i></u> | <u>003</u> is/are: a)⊠ acc | cepted or b)□ c | objected to by the Examin | ier. | | | |
| | Applicant may not request that any object | tion to the drawing(s) | be held in abeyaı | nce. See 37 CFR 1.85(a). | | | | |
| | Replacement drawing sheet(s) including | the correction is requi | red if the drawing | g(s) is objected to. See 37 C | FR 1.121(d). | | | |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | | | |
| Priority เ | ınder 35 U.S.C. § 119 | | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | | | |
| 2) Notic 3) Inforr | t(s) e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PT nation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date <u>02/28/2008</u> . | ГО-948) | Paper No(| Summary (PTO-413) (s)/Mail Date Informal Patent Application | | | | |

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DETAILED ACTION

Response to Arguments

1. The Applicant's arguments with respect to newly amended claim 6 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claim 6, 8-10, and 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Katase (US 6,525,865) in view of Duthaler (US 2004/0155857).

As to **claim 6**, Katase teaches a process for producing an electrophoretic display [abstract lines 1-2] having optical modulation members (any one of the particles of the "electrophoretic particles 3" shown on fig. 16, a plurality of "dispersion medium 2" included in of the "divided cells 11C1" show on fig. 22, and "color filters" disclosed in col. 15 lines 20-30), comprising the steps of:

providing the optical modulation members each with a dye [col. 19 lines 39-42];

depositing the optical modulation members on a substrate [fig. 16].

Katase further teaches coloring the dyes included in the optical modulation members [col. 19 lines 39-42].

Katase does not expressly teach a specific step of coloring the dyes, i.e. applying a specific stimulus selected from a plural kind of stimuli to the dyes to change the color of the dyes.

However, Duthaler [par. (0107), emphasis on lines 23-31] teaches a concept of coloring a plural kind of dyes, each of which is capable to be colored to a specified color by application of a specific stimulus selected from a plural kind of stimuli and applying the plural kind of stimuli individually to predetermined different areas and thereby coloring the dyes to different colors [par. (0107), emphasis on lines 31-39].

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the concept of Duthaler, coloring dyes by applying a plural kind of stimuli individually to predetermined different areas, to the display of Katase, in order to allow the colors of the dyes of the display to be changed remotely rather than manufacturing the dyes with predetermined colors.

As to **claim 8**, Katase [fig. 14] teaches a step of spatially sealing ("sealer 202") hermetically the electrophoretic particles ("electrophoretic particle 3") and the dispersion medium ("dispersion medium 2").

As to **claim 9**, Katase as modified by Duthaler teaches that the coloring step is performed after the hermetically sealing step [Duthaler: par. (107), emphasis on lines 31-39, note that in the coloring method of Duthaler, the coloring is performed after the capsules containing the dyes are incorporated into the display. Thus, Duthaler teaches an idea of performing the coloring step after the object containing the dyes is incorporated into the display].

As to **claim 10**, Katase as modified by Duthaler teaches that the stimuli are selected from the group consisting of thermal energy, light energy, electron ray, y ray, and X ray [Duthaler: par. (107) line 31].

As to **claim 13**, Katase as modified by Duthaler teaches that the stimuli (Duthaler: "different infra-red wave-lengths") are applied in a state that the electrophoretic particles and the dispersion medium are encapsulated in a microcapsule [Duthaler: par. (107), emphasis on lines 31-32].

As to **claim 14**, Katase as modified by Duthaler teaches the dye (Katase: the dye included in the medium) [Katase: col. 19 lines 39-42] being encapsulated in a microcapsule (Katase: "cell having dimension of microns in length") [Katase: col. 9 lines 50-52].

As to **claim 15**, Katase as modified by Duthaler teaches that the dye is a nearinfrared absorption colorant ("*infra-red-wave-lengths*") [Duthaler: par. (107), emphasis on line 31].

As to **claim 16**, Katase as modified by Duthaler teaches that the dye is a mixture of photosensitive agents sensitive to blue, green, and red light [Duthaler: par. (107), emphasis on lines 23-27].

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to SEOKYUN MOON whose telephone number is (571)272-5552. The examiner can normally be reached on Mon - Fri (8:30 a.m. - 5:00 p.m.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on (571) 272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/S. M./ Examiner, Art Unit 2629

/Sumati Lefkowitz/ Supervisory Patent Examiner, Art Unit 2629